CLAIM AMENDMENTS:

Claims 1-16 (Cancelled)

17. (Currently amended) A method for separating mixed particulate material into particles of at least two different specific gravities, comprising:

providing at least one mixed particulate material separating apparatus including a separating chamber with an inlet and an outlet, a discharge tube having a first end coupled to the outlet of the separating chamber and a second end defining a discharge outlet and an angle of entry connection having a longitudinal axis, a discharge of the angle of entry connection and the longitudinal direction of the entry connection being angled upwardly at an incline with respect to a longitudinal axis of the separating chamber;

creating a vacuum at the first end of the discharge tube which provides suction to the separating chamber to draw mixed particulate material into the separating chamber through the angle of entry connection in a linear direction toward a wall of the separating chamber so that the mixed ~~particular~~ particulate material has both upward and horizontal velocity components, the horizontal velocity component being sufficient to cause the mixed particulate matter to strike [[a]] the wall of the separating chamber at a location opposite the entry connection; [[and]]

separating the mixed particulate material into a lower specific gravity and a higher specific gravity by the vacuum pulling the lower specific gravity material up and out of the mixed particulate material separating apparatus via [[a]] the discharge tube, and allowing the higher specific gravity material to fall from the separating chamber; and

producing a positive pressure at the second end of the discharge tube and discharging the lower specific gravity material through the discharge outlet.

18. (Original) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 17, further comprising:

providing the mixed particulate material to the mixed particulate material separating apparatus.

19. (Previously presented) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 18, further comprising:

collecting the material with a higher specific gravity at a bottom of the separating chamber; and

releasing the collected material with a higher specific gravity at a predetermined interval of time.

20. (Currently amended) A method for separating mixed particulate material into particles of at least two different specific gravities, comprising:

providing a first mixed particulate material separating apparatus including a separating chamber, and an angle of entry connection, the angle of entry connection having a longitudinal axis being angled upwardly at an inclined angle with respect to a longitudinal axis of the separating chamber;

creating a vacuum ~~to occur~~ in an outlet of the separating chamber whereby mixed particulate material enters the mixed particulate material separating apparatus through the angle of entry connection so that the mixed ~~particular~~ particulate material has both upward and horizontal velocity components, the horizontal velocity component being sufficient to cause the mixed particulate matter to strike a wall of the separating chamber at a location opposite the entry connection;

separating initially the mixed particulate material into a lower specific gravity and a higher specific gravity by the vacuum pulling at least a portion of the lower specific gravity material up and out of the separating chamber of the first mixed particulate material separating apparatus, and allowing an initially separated mixed particulate material which comprises the higher specific gravity material and remainder of the lower specific gravity material to fall ~~from~~ downward in the separating chamber of the mixed particulate material separating apparatus;

moving the initially separated mixed particulate material to a second mixed particulate material separating apparatus;

providing a flow of air from an air flow source to the second mixed particulate material separating apparatus; and

separating further the mixed particulate material into a lower specific gravity and a higher specific gravity by the flow of air discharging at least a portion of the remainder of the lower specific gravity material up and out of the second mixed particulate material separating apparatus, and allowing the higher specific gravity material to fall from the second mixed particulate material separating apparatus.

21. (Original) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 20, further comprising:

transporting the higher specific gravity material away from the second mixed particulate material separating apparatus.

Claim 22 (Cancelled)

23. (Currently amended) The method for separating mixed particulate material into particles of ~~several~~ different specific gravities according to claim 20, wherein the step of moving the initially separated mixed particulate material to the second mixed particulate material separating apparatus comprises:

transporting the initially separated mixed particulate material to a second discharge tube.

24. (Currently amended) A method for separating mixed particulate material into particles of at least two different specific gravities, comprising:

providing a first mixed particulate material separating apparatus including a separating chamber having a longitudinal axis, and an angle of entry connection, the angle of entry connection having a longitudinal axis being angled upwardly at an inclined angle with respect to the longitudinal axis of the separating chamber;

creating a vacuum ~~to occur~~ in an outlet of the separating chamber whereby mixed particulate material enters the separating chamber of the first mixed particulate material separating apparatus through the angle of entry connection so that the mixed ~~particular~~ particulate material has both upward and horizontal velocity components, the horizontal velocity component being sufficient to cause the mixed particulate matter to strike a wall of the separating chamber at a location opposite the entry connection;

separating initially the mixed particulate material into a first group and a second group of mixed particulate material by the vacuum pulling at least a portion of the first group of mixed particulate material up and out of the separating chamber of the first mixed particulate material separating apparatus, and allowing the second group of mixed particulate material to fall ~~from~~ downward in the separating chamber of the first mixed particulate material separating apparatus;

providing a second mixed particulate material separating apparatus and a second flow of air from an air flow source through the second mixed particulate material separating apparatus.

Claim 25 (Cancelled)

26. (Currently amended) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 17, wherein the angle between the longitudinal axis of the angle of entry connection and the longitudinal axis of the separation chamber is between about 40° and 50°.

27. (Currently amended) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 17, wherein the angle between the longitudinal axis of the angle of entry connection and the longitudinal axis of the separation chamber is about 45°.

28. (Currently amended) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 20, wherein the angle between the longitudinal axis of the angle of entry connection and the longitudinal axis of the separation chamber is between about 40° and 50°.

29. (Currently amended) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 20, wherein the angle between the longitudinal axis of the angle of entry connection and the longitudinal axis of the separation chamber is about 45°.

30. (Currently amended) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 24, wherein

the angle between the longitudinal axis of the angle of entry connection and the longitudinal axis of the separation chamber is between about 40° and 50°.

31. (Currently amended) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 24, wherein

the angle between the longitudinal axis of the angle of entry connection and the longitudinal axis of the separation chamber is about 45°.

32. (New) The method of claim 17, wherein said entry connection is coupled to a feed conduit for supplying the particulate material to the separating chamber, the feed conduit having a substantially rectilinear portion coaxially connected to the entry connection and extending at said inclined angle, said method comprising drawing said particulate material in a substantially rectilinear path through the feed conduit and entry connection at the inclined angle to the wall of the separating chamber.

33. (New) The method of claim 17, wherein said discharge tube includes at least one injector tube extending through a side wall of the discharge tube, said method comprising injecting pressurized air through the injector tube in a direction toward the discharge outlet to produce the positive pressure in an area downstream of the injector tube with respect to the direction of travel of the lower specific gravity material, and to produce the vacuum in an area upstream of the discharge tube and the separating chamber.

34. (New) The method of claim 20, wherein the outlet of the separating chamber is connected to a first end of a discharge tube, the discharge tube having a second end defining a discharge outlet, the method comprising producing a positive pressure at the second end of the discharge tube to discharge the particulate material.

35. (New) The method of claim 34, wherein said discharge tube includes an injector tube extending through a side wall of the discharge tube, the method further comprising injecting pressurized air through the injector tube to produce the positive pressure in an area downstream of the injector tube.

36. (New) The method of claim 35, comprising positioning the injector tube at an inclined angle with respect to an axis of the discharge tube and directing the pressurized air into the discharge tube at the inclined angle.

37. (New) The method of claim 36, comprising injecting the pressurized air into the discharge tube to produce the vacuum in an area upstream of the injector tube.

38. (New) The method of claim 34, wherein said discharge tube includes a plurality of injector tubes extending through a side wall of the discharge tube at an inclined angle directed toward the discharge end, the method further comprising injecting pressurized air through the injector tubes to produce the positive pressure in an area downstream of the injector tubes and to produce the vacuum in an area upstream of the injector tubes.

39. (New) The method of claim 38, wherein the entry connection is coupled to a feed conduit for supplying the particulate material to the separation chamber, the feed conduit

having a substantially rectilinear portion coaxially connected to the entry connector and extending at said inclined angle, the method further comprising drawing the particulate material in a rectilinear path through the feed conduit and the entry connector at the inclined angle.

40. (New) The method of claim 24, wherein the apparatus further includes a discharge tube having a first end connected to the outlet of the separating chamber and a second end defining a discharge outlet, a plurality of injector tubes extending through a wall of the discharge tube at an inclined angle toward the discharge end, the method comprising injecting pressurized air through the injector tubes toward the discharge end to produce a positive pressure in an area downstream of the injector tubes to discharge the particulate material and to produce the vacuum in an area upstream of the injector tubes and in the separating chamber.

41. (New) The method of claim 40, wherein the apparatus includes a feed conduit having a first end coupled to the entry connection and a second end for receiving the particulate material from a supply, the feed conduit having a substantially rectilinear portion coaxially connected to the entry connector and extending at the inclined angle, the method further comprising drawing the particulate material in a rectilinear direction through the feed conduit and the entry connector into the separation chamber at the inclined angle.